WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

CIRPAC Meeting Summary

The following pages contain a summary of the presentations and discussions from the WCWCD Community Integrated Resource Planning Advisory Committee Meeting of November 21, 2013.

These pages, together with the presentation slides, constitute the meeting record.

533 E Waterworks Drive
St. George, UT 84770
435-673-3617
wcwcd.org

Committee Members in Attendance

—Larry Blake, Rancher
—Lee Bracken, City of Enterprise
—Ty Bringhurst, Toquerville Citizen
—Dave Clark, Banker
—Paul Clove, Businessman
—Murray Gubler, Chamber of Commerce
—Mary Jo Hafen, Santa Clara City
—Laron Hall, Community Citizen
—Scott Hirschi, Economic Development
—David Isom, Health Care
—Floyd Jackson, Contractor
—Dick Kohler, Architect
—Natalie Larson, Realtor
—Carol Sapp, Southern Utah Home Builders Association
—Brad Seegmiller, Southern Utah Title Company
—LeAnn Skrzynski, Citizens for Dixie's Future
—Scott Taylor, St. George City
—Travis Wilkinson, Small Business

Committee Members Absent or Excused

—Barry Barnum, St. George City
—Larry Bergeson, Education
—Kip Bowler, Banker/Rancher
—James Eardley, Washington County
—Tracy Ence, Development
—Chris Hart, Ivins City
—Lawrence Snow, Shivwits Band of Paiute
—Don Stratton, Vision Dixie
—Darin Thomas, City of Hurricane
—John Wadsworth, Farmer
—Karl Wilson, LaVerkin City

District/Committee Staff Members in Attendance

—Ed Bowler, Board Chairman
—Ronald Thompson, General Manger
—Barbara Hjelle, Associate General Manager/Counsel
—Corey Cram, Associate General Manager
—Roberta McMullin, Executive Administrator
—Doug Wilson, New Project Development and Information Systems Manager
—Karry Rathje, Public Information Manager
—Brie Thompson, Chemical Engineer
—Tina Esplin, Legal/Administrative Assistant
—Judie Brailsford, Public Outreach
—Dr. John Brailsford, Facilitator

Other Attendees

—Jeremy Aguero, Applied Analysis
—Sean Lovitt, Applied Analysis
—Victor Iverson, Senator Mike Lee's Representative
—David Demille, *The Spectrum*
—Josh Warburton, *The Independent*
—Mori Kessler, *STGnews.com*
—Dallas Hyland
—Steve Eyerhard, Red Cliffs Audubon
—Dale Barnes
—Karen Monsen
—Fred Brown
—Raye Ann Bennett
—Bob Bennett
—Jim Guard
—Roger Brady, Trench Shoring Company
—Ray Kuehne
—Stacy Young, Development Solutions Company
—Joseph, Southern Utah Home Builders

—Jeff Sedran, Citizens for Dixie's Future
—David Barish
—Allen McKie, Bloomington CC
—Warren Wright
—Tom Butine
—Dr. MacHarmer
—Lisa Rutherford
—Paul Van Dam
—Mari Smith, Southern Utah Home Builders
—George Stoddard
—Roger Adams
—Jake Joines
—Nancy Norbeck, Snow Park TH
—Peter Norbeck, Snow Park TH
—Kathy Baxth
—Greg Aldred
—Jane Whalen, Citizens for Dixie's Future
—Rick Meyers
—Susan Biesele
—Bill Biesele
—J. Thompson, Aquila Investment
—Penny Feldman
—Jeff Feldman
—Allen Davis, Winchester Hills Water Company
—James Sullivan, S&S Homes/Southern Utah Home Builders Association

(Some names are spelled as nearly as legible)

1. Welcome

Dr. John Brailsford welcomed the committee and visitors and thanked the committee members for their involvement and input. He introduced and welcomed Jeremy Aguero, who was back to follow up on his presentation made at the May CIRPAC meeting and share further research with the committee.

2. Presentation: *Lake Powell Pipeline Preliminary Financial Modeling*—Jeremy Aguero, Principal, Applied Analysis

Jeremy Aguero expressed appreciation for the opportunity to be here today. He noted that at his prior presentation there was discussion surrounding the economic implications of water resource sustainability and what it meant regarding of job creation, investment in terms of communities and general economic development opportunities. We talked about drought, risk factors, and a other things largely surrounding the concept that water is important to the stability of individual communities.

The next step is building the financing fundamentals relative to the development of the Lake Powell pipeline project (LPPP) and water resources more generally. Jeremy identified two goals. First the opportunity to refine and hone down some of the questions talked about in May, with an exercise to narrow the discussion, not intended to be a financial determination. Second what might LPPP do to rates and impact fees, and what is it going to mean for Washington County and the cities over the long run.

Jeremy reviewed his credentials and expertise. Jeremy referred to a letter sent recently to the House of Representatives, noting that he is an analyst, not an advocate. His job is to research and present facts about the general economics of water and to work through some of the related financial issues.

Misinformation and creating controversy focused on individuals obfuscates the truth and can be counter-productive. He described his communication with Gabriel Lozada, the professor who penned the previously mentioned letter, and that Jeremy afforded him the courtesy to respond to Jeremy's analysis, as there are a couple of points important to the discussion that needed mutual understanding and clarification. Lozada's report states:

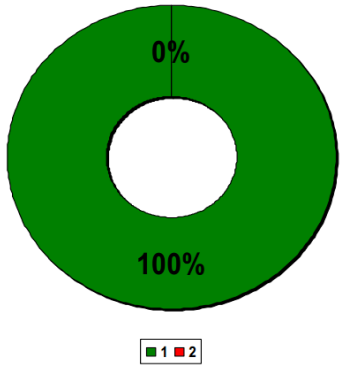
- "Assuming a 50-year straight-line debt repayment, the fully amortized cost of the project would be between $37.6 million per year and $70.2 million per year, more than the $10.3 million reported in the District's 2011 net revenues…"
- "If this initial analysis is correct, Washington County Water Conservancy District would have to increase its net revenues by roughly 370 percent…"
- "In order for impact fees to pay for the additional debt service of $47 million…they would have to increase by 900 percent…which is problematic."

A couple of things jump out here. Their comparison to net revenues in 2011 for a project to be done in the future uses straight line amortization. The concept of **straight-line amortization** is that you take total principal balance like in a house and you straight-line it over a 30, 40, 60 year period. That is the type of analysis that was used in this paper, and it is not how the LPPP financing will work. Jeremy's conversation with Professor Lozada showed the professor to be completely forthright, saying we need to have more studies and understand in more detail how it would be funded. After talking through the conceptual models to be considered with the professor, it was apparent that they are on the same page in terms of what we are doing versus the limitations of what they did in the original papers. In the broadcast news report, there were a lot of percentages regarding water uses. The sum of $30,000 dollars was stated as the increased impact fees. If anyone was about to offer $30,000 in impact fees or triple your water rates, no one would suggest that was a good thing. The analysis that was done by the professors does not reflect the LPP Act (LPPA), and it specifically said it doesn't and was never intended to reflect the LPPA. And they are right in saying that a 900% increase in costs would be problematic.

Jeremy distributed a polling device, the Turning Point clicker. He noted that participants would answer the questions knowing the responses are not coded into the computer but rather are completely anonymous.

Generally speaking, is Utah's economy headed in the right direction?

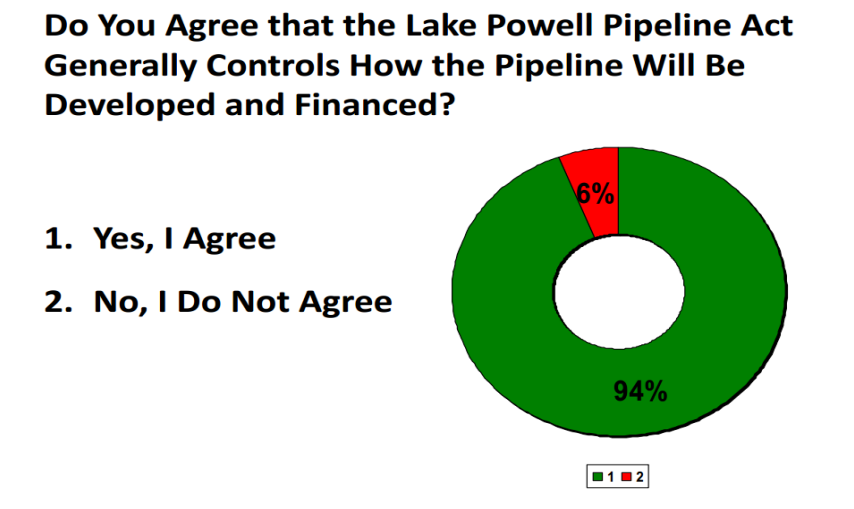
1. **Yes, It Is Headed in the Right Direction**
2. **No, It Is Not Headed in the Right Direction**



QUESTION: Is Utah's economy headed in the right direction?

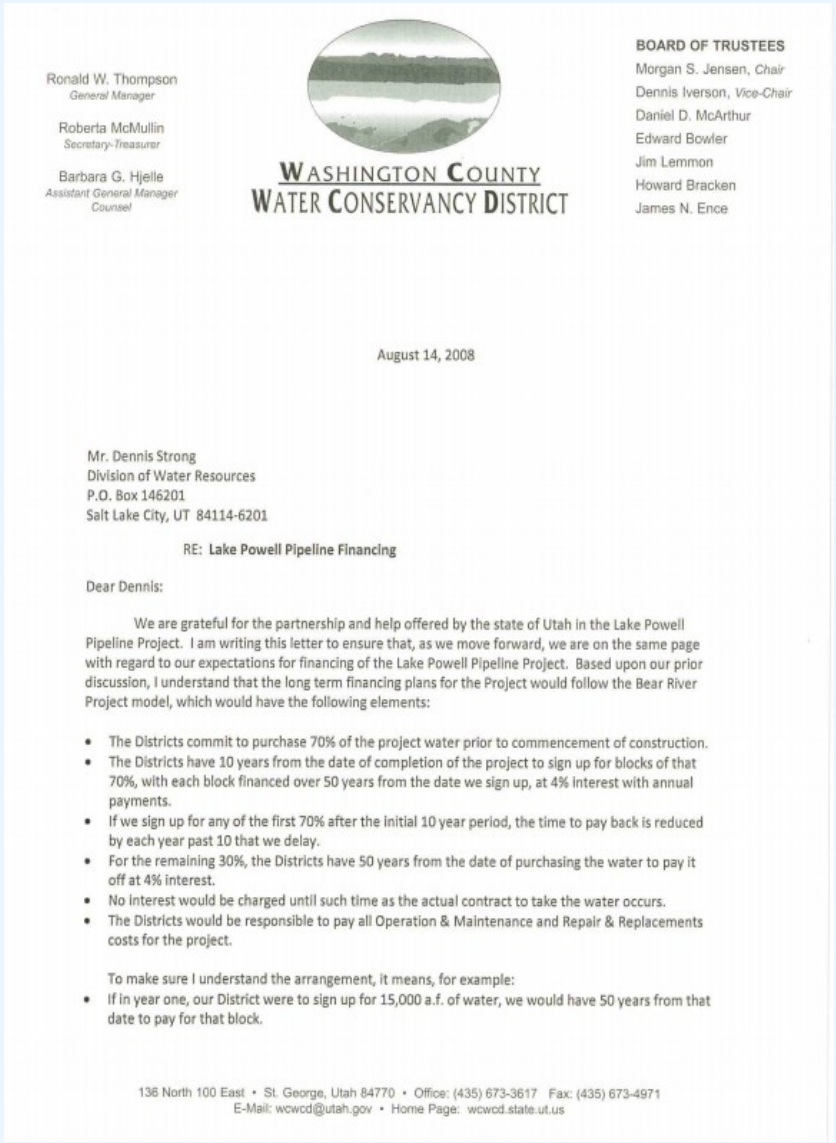
The 2006 LPPA was explained and included in the CIRPAC material.

QUESTION: Do you agree that the Lake Powell Pipeline Act generally controls how the pipeline will be developed and financed?



ANSWER: 94% agree and 6% disagree. No concerns or comments.

Jeremy showed the August 14, 2008 letter from Ronald Thompson, General Manager, Washington County Water Conservancy District to Utah Division of Water Resources stating his understanding and expectations for financing of the LPPP.



Ronald W. Thompson
General Manager

Roberta McMullin
Secretary-Treasurer

Barbara G. Hjelle
Assistant General Manager Counsel

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

BOARD OF TRUSTEES
Morgan S. Jensen, *Chair*
Dennis Iverson, *Vice-Chair*
Daniel D. McArthur
Edward Bowler
Jim Lemmon
Howard Bracken
James N. Ence

August 14, 2008

Mr. Dennis Strong
Division of Water Resources
P.O. Box 146201
Salt Lake City, UT 84114-6201

RE: **Lake Powell Pipeline Financing**

Dear Dennis:

We are grateful for the partnership and help offered by the state of Utah in the Lake Powell Pipeline Project. I am writing this letter to ensure that, as we move forward, we are on the same page with regard to our expectations for financing of the Lake Powell Pipeline Project. Based upon our prior discussion, I understand that the long term financing plans for the Project would follow the Bear River Project model, which would have the following elements:

- The Districts commit to purchase 70% of the project water prior to commencement of construction.
- The Districts have 10 years from the date of completion of the project to sign up for blocks of that 70%, with each block financed over 50 years from the date we sign up, at 4% interest with annual payments.
- If we sign up for any of the first 70% after the initial 10 year period, the time to pay back is reduced by each year past 10 that we delay.
- For the remaining 30%, the Districts have 50 years from the date of purchasing the water to pay it off at 4% interest.
- No interest would be charged until such time as the actual contract to take the water occurs.
- The Districts would be responsible to pay all Operation & Maintenance and Repair & Replacements costs for the project.

To make sure I understand the arrangement, it means, for example:

- If in year one, our District were to sign up for 15,000 a.f. of water, we would have 50 years from that date to pay for that block.

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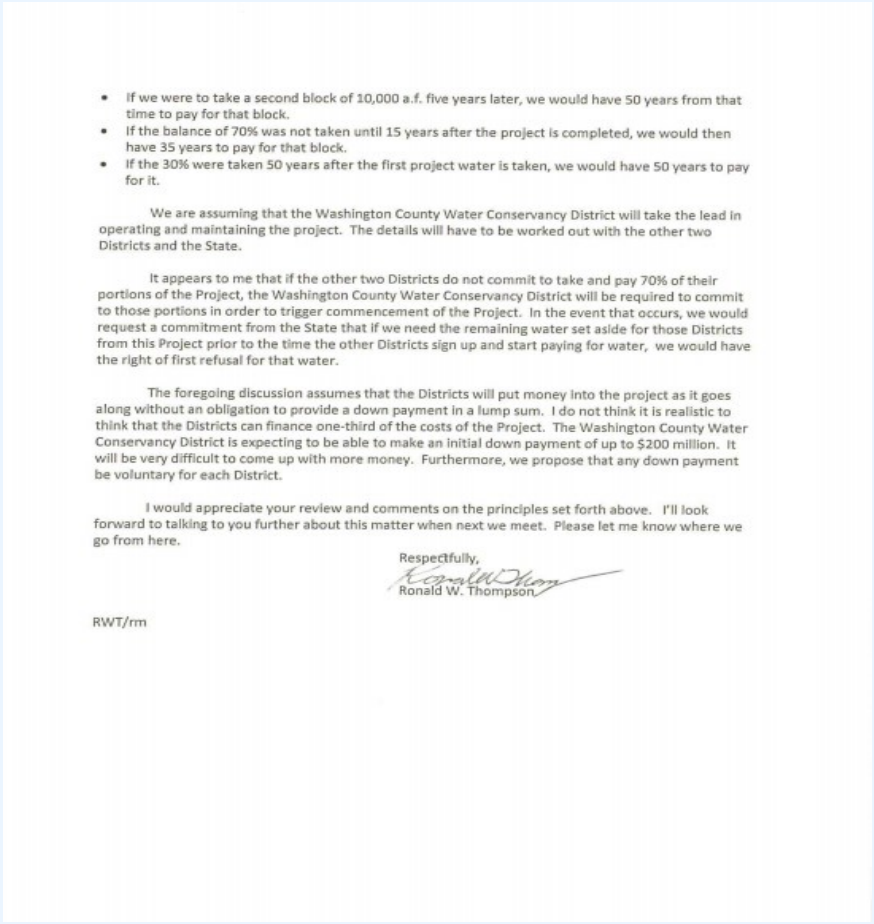
E-Mail: wcwcd@utah.gov • Home Page: wcwcd.state.ut.us



- If we were to take a second block of 10,000 a.f. five years later, we would have 50 years from that time to pay for that block.
- If the balance of 70% was not taken until 15 years after the project is completed, we would then have 35 years to pay for that block.
- If the 30% were taken 50 years after the first project water is taken, we would have 50 years to pay for it.

We are assuming that the Washington County Water Conservancy District will take the lead in operating and maintaining the project. The details will have to be worked out with the other two Districts and the State.

It appears to me that if the other two Districts do not commit to take and pay 70% of their portions of the Project, the Washington County Water Conservancy District will be required to commit to those portions in order to trigger commencement of the Project. In the event that occurs, we would request a commitment from the State that if we need the remaining water set aside for those Districts from this Project prior to the time the other Districts sign up and start paying for water, we would have the right of first refusal for that water.

The foregoing discussion assumes that the Districts will put money into the project as it goes along without an obligation to provide a down payment in a lump sum. I do not think it is realistic to think that the Districts can finance one-third of the costs of the Project. The Washington County Water Conservancy District is expecting to be able to make an initial down payment of up to $200 million. It will be very difficult to come up with more money. Furthermore, we propose that any down payment be voluntary for each District.

I would appreciate your review and comments on the principles set forth above. I'll look forward to talking to you further about this matter when next we meet. Please let me know where we go from here.

Respectfully,

Ronald W. Thompson

RWT/rm

Jeremy noted a number of issues that may affect how the Lake Powell pipeline is ultimately financed, including the following important points:

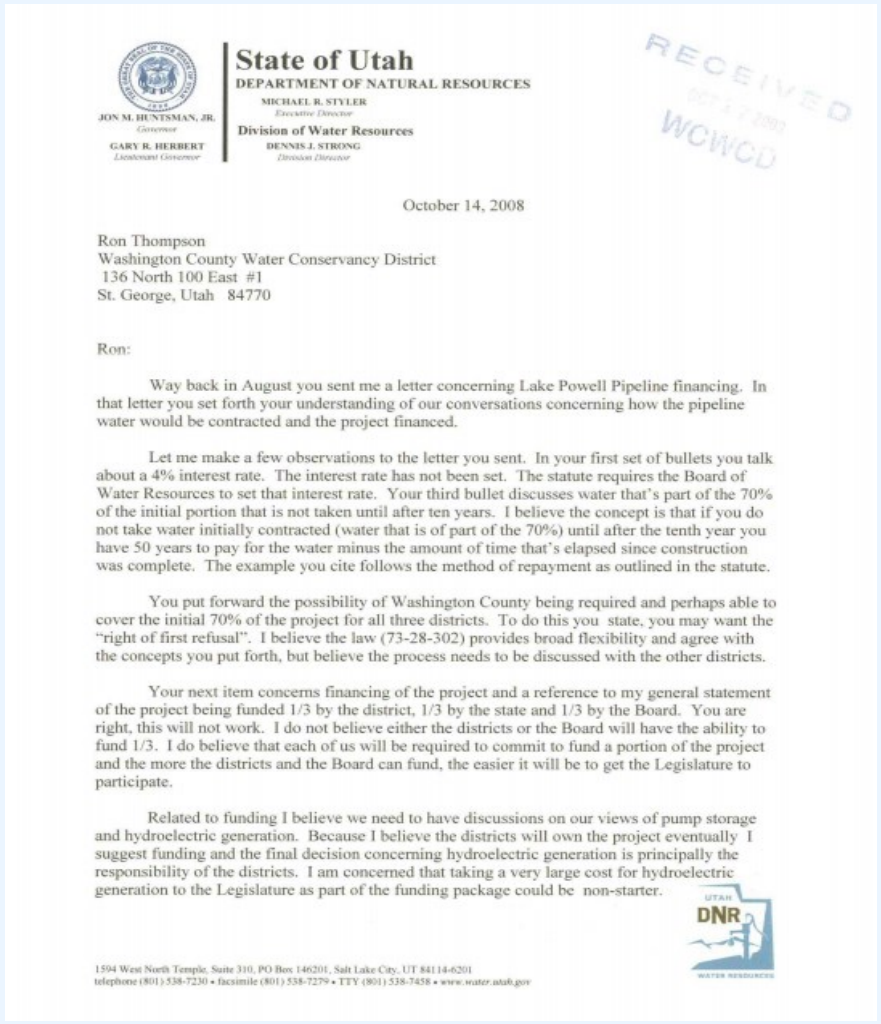
- The District commits to purchase 70% (not 100%) of the project water prior to commencement of construction. The District doesn't have to commit to 100% of the water up front. You will recall in the analysis done by the economists they do make the assumption that 100% of this project be financed up front.

- The District has 10 years from the date of completion of the pipeline project to sign up for blocks of that 70% (blocks mean how much water you are planning to take down). Each block will be financed over 50 years from the date they sign up, at 4% interest, with annual payments. The beauty and probably most favorable provision of the LPPA is that the district doesn't have to pay for the water until it is needed.

- If the District signs up for any of the first 70% after the initial period, the time to pay back is reduced by each year past 10 that we delay.

The take home message is that the District commits to the first 70% of the water, not 100%, takes it down in blocks and starts paying for it when needed. For the remaining 30%, the District has 50 years from the date of purchase to pay off at 4%, which interest is not incurred until the water is actually needed. Contrast this against the economists' model of straight line amortization bearing interest beginning in 2014 and going out for 50 years, which is admittedly different from the assumptions that the professors made when they offered their letter. Unfortunately, they were not familiar with the Lake Powell Pipeline Act.

Jeremy showed the October 14, 2008 letter from the Utah Department of Natural Resources in response to Mr. Thompson's August 14, 2008 letter.



State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor
Division of Water Resources
DENNIS J. STRONG
Division Director

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October 14, 2008

Ron Thompson
Washington County Water Conservancy District
136 North 100 East #1
St. George, Utah 84770

Ron:

Way back in August you sent me a letter concerning Lake Powell Pipeline financing. In that letter you set forth your understanding of our conversations concerning how the pipeline water would be contracted and the project financed.

Let me make a few observations to the letter you sent. In your first set of bullets you talk about a 4% interest rate. The interest rate has not been set. The statute requires the Board of Water Resources to set that interest rate. Your third bullet discusses water that's part of the 70% of the initial portion that is not taken until after ten years. I believe the concept is that if you do not take water initially contracted (water that is of part of the 70%) until after the tenth year you have 50 years to pay for the water minus the amount of time that's elapsed since construction was complete. The example you cite follows the method of repayment as outlined in the statute.

You put forward the possibility of Washington County being required and perhaps able to cover the initial 70% of the project for all three districts. To do this you state, you may want the "right of first refusal". I believe the law (73-28-302) provides broad flexibility and agree with the concepts you put forth, but believe the process needs to be discussed with the other districts.

Your next item concerns financing of the project and a reference to my general statement of the project being funded 1/3 by the district, 1/3 by the state and 1/3 by the Board. You are right, this will not work. I do not believe either the districts or the Board will have the ability to fund 1/3. I do believe that each of us will be required to commit to fund a portion of the project and the more the districts and the Board can fund, the easier it will be to get the Legislature to participate.

Related to funding I believe we need to have discussions on our views of pump storage and hydroelectric generation. Because I believe the districts will own the project eventually I suggest funding and the final decision concerning hydroelectric generation is principally the responsibility of the districts. I am concerned that taking a very large cost for hydroelectric generation to the Legislature as part of the funding package could be non-starter.

UTAH DNR WATER RESOURCES

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telephone (801) 538-7230 • facsimile (801) 538-7279 • TTY (801) 538-7458 • www.water.utah.gov

Ron Thompson
Page 2
October 14, 2008

I believe the time has come to discuss these issues and have asked Eric to set up a meeting. I look forward to talking more with you about these issues and appreciate all you do.

Respectfully,

Dennis

Dennis J. Strong, P.E.
Director

Jeremy noted that the letters generally confirmed Mr. Thompson's understanding, but pointed out a couple of differences. The major difference is the rate of interest used that is yet to be determined at the point when you take the water down.

Jeremy showed the October 26, 2012 letter from economists.

Honorable Speaker Lockhart
Utah House of Representatives
350 North State, Suite 350
PO Box 145030
Salt Lake City, Utah 84114

Honorable President Waddoups
Utah State Senate
320 State Capitol
PO Box 145115
Salt Lake City, Utah 84114

Honorable Senator Curtis S. Bramble, Chair
Honorable Representative Patrick Painter, Chair
Revenue and Taxation Interim Committee

October 16, 2012

Dear Speaker Lockhart, President Waddoups, and Senator Bramble,

We are writing with some concern about the repayment claims made with respect to financing the proposed Lake Powell Pipeline. Our preliminary analysis raises important questions regarding the ability of the Washington County Water Conservancy District to repay debt issued by the State of Utah for this project. Our analysis is based on four points described below and summarized on page 3.

As you are no doubt aware, the Lake Powell Pipeline Act includes language mandating that the project cost will be repaid to the State of Utah with interest. The accompanying reference pages includes Utah Code 73-28-402 Agreement for delivery – Period for repayment of costs from the Lake Powell Pipeline Development Act.

1. Water Conservancy District Existing Net Revenues. According to our initial review of the 2011 Audited Financial Statement of the Washington County Water Conservancy District, the agency reported a $10.275 million change in Net Assets in 2011. In a business this would be considered as Net Income. This data is based on the Financial Analysis of the District's Funds Change in Net Assets statement, which is attached.

2. 50 Year Repayment Obligation to State Taxpayers. We prepared a calculation of total annual debt service assuming the portion of the project cost subject to repayment by the Washington County Water Conservancy District is $969 million. This figure was selected because it was presented to the Legislative Water Issues Task Force on November 14, 2011; many people believe the actual project cost will be higher. Assuming a 50 year repayment period, the annual debt service varies by interest rate as follows:

1

Annual Debt Service Payments
by the Washington County Water Conservancy District

	Interest Rate			
Repayment Cost	**0.03**	**0.04**	**0.05**	**0.07**
$969 Million	$37,660,000	$45,110,000	$53,080,000	$70,210,000

At any of these interest rates, debt service for this level of borrowing over 50 years is clearly significantly larger than the current $10.275 million in Net Annual Revenues of the District.

3. Possible Additional Payments from the District. According to testimony presented to the Legislative Water Issues Task Force on November 14, 2011, the Washington County Water Conservancy District may be planning to repay its debts by making additional payments not included above. The first is to make a 10% down payment. This brings the amount needed to be financed down to $969 - $97 = $872 million. (The proposal is to bond for this $872 million in three steps: first, $126 million; two years later, $373 million; and two years after that, the remaining $373 million.) The second additional financial commitment is for $20 million per year, as shown in red bars in a Revenue Slide presented during the November 14, 2011 discussion (attached below). This figure is simply an estimate, and was supported by testimony presented during the above meeting. As shown from this bar graph and this testimony, this $20 million would be contributed annually from 2020 until 2032.

If the District is able to make the 10% down payment and these $20 million annual payments, the amount they would owe in 2033 would be $1.065 billion if the interest rate is 3% (more if the interest rate were higher); to pay this off by the year 2080, the annual payment needed at 3% would be approximately $47,345,000 per year. It is important to note that this figure is only a projection and based only on materials presented to date. These projections could change.

4. Existing Debt Service by Washington County Water Conservancy District. Based on our preliminary review of the 2011 Audited Financial Statement of the Washington County Water Conservancy District, it appears this agency currently has approximately $10.7 million in existing annual debt service for previous obligations. These obligations are summarized in the adjacent table which is attached.
Note: there may be additional debts by this agency we are unaware of.

2

Summary of Total Projected Debt Service and Revenue Shortfalls. Based upon this information, future anticipated annual debt service to the Washington County Water Conservancy District due to this project could be $47 million.

As stated above, the current net annual revenues of this agency are currently $10.275 million, which is far less than $47 million. To put this concept into stark terms, if this initial analysis is correct, it would require the Washington County Water Conservancy District to increase its net annual revenues by roughly 370 percent ((47-10)/10).

Given the observed decline in growth rates compared to those predicted in 2006, we wonder where the significant increase in revenues required to repay this project will come from. We could find no information to indicate how the Washington County Water Conservancy District can raise this revenue.

Although there has been testimony these revenues could come from real estate impact fees on new homes and presumably commercial buildings, we could not find any projections indicating total annual revenues expected as a result of impact fee increases. The 2011 Washington County Water Conservancy District Audited Financial statement indicates that existing impact fee collections totaled a mere $4.62 million in 2011, and are already accounted for in the district's net revenues. In order for impact fees to pay the additional debt service level of $47 million, this amount in new impact fees would have to be collected every year during this repayment period. This corresponds to a roughly 10-fold (900 percent) increase in impact fee revenues, which is problematic. Since impact fees are paid only once by new residents and businesses, it is important to determine exactly what rate of growth would be required to raise this large revenue stream and over what period of time.

Accordingly, we suspect that at least some of the increase in revenues would have to come from raising water rates in order to generate an increase in water rate revenues from residents. Depending upon how large these water rate increases would be, they could lead to a significant reduction in total water use. It would be appropriate to ask how a 370 percent increase in net revenues would impact water rates and ratepayers.

Given these facts, the only financially prudent way forward is for the State to carefully study whether Washington County residents have the capacity to actually repay these debt obligations before the State indebts itself with this project. Since this debt service is significantly higher than currently practiced commercial lending standards, we also seek to understand what would occur if this agency defaults on its repayment obligations.

Thank you for the opportunity to provide some input to this discussion.

Sincerely,

Gail Blattenberger
Professor
Department of Economics
University of Utah

Gabriel Lozada
Professor
Department of Economics
University of Utah

Professor Arthur Caplan
Professor
Applied Economics
Utah State University

David Tufte
Associate Professor
Department of Economics and Finance
School of Business
Southern Utah University

Kenneth Jameson
Professor Economics
University of Utah

Thomas Maloney
Chair
Economics Department
University of Utah

Richard Fowles
Associate Professor
Economics Department
University of Utah

Anne Yeagle
Lecturer
Economics Department
University of Utah

Korkut Erturk
Professor Economics
Economics Department
University of Utah

Hans Ehrbar
Associate Professor
Economics Department
University of Utah

Mike Monson
Retired Director
Property Tax Division
Utah State Tax Commission

References for Financial Analysis of Possible Repayment
for Proposed Lake Powell Pipeline

Repayment Requirement. Utah Code 73-28-402 Agreement for delivery – Period for repayment of costs from the Lake Powell Pipeline Development Act.

73-28-402. Agreement for delivery - Period for repayment of costs.
(1) The board and each district shall establish by contract the timing and amount of developed water to be delivered to the district.
(2) If a contract was made before the project's completion, the district shall repay the preconstruction and construction costs within 50 years from the date of:
(a) the delivery of developed water to the district during the first ten years after the project is completed; or
(b) the project's completion for any developed water delivered to the district after the tenth anniversary date of the project's completion.
(3) If a contract was made after the project's completion date, the district shall repay the preconstruction and construction costs within a period not to exceed 50 years from the date that the contract was made.
(4) The board shall establish and charge a reasonable interest rate for the unpaid balance of reimbursable preconstruction and construction costs.

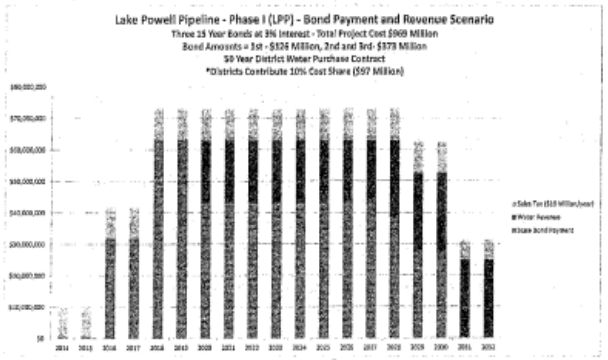
1. Water Conservancy District Existing Net Revenues

Financial Analysis of the District's Funds
Change in Net Assets

	Business-type Activities 2011	Business-type Activities 2010
Revenues:		
Charges for Services	$10,964,683	$9,986,365
Capital grants and contributions	0	0
General Revenues:		
Interest earnings	112,313	$92,806
Operating transfers	5,970,680	5,415,853
Transfers of Capital Assets	6,309,617	2,354,164
Total Revenues and Transfers	$23,357,293	$17,846,188
Expenses:		
Water and power utilities	$10,722,703	$9,666,959
Interest on long-term debt	2,358,753	2,434,315
Total Expenses	$13,081,456	$12,101,274
Change in Net Assets	[redacted]	$5,747,914
Net Assets at Beginning of Year	80,974,464	75,226,550
Net Assets at End of Year	$91,250,301	$80,974,464

Net Revenues = $10.275 million in 2011

3. Possible Additional Payments from the District. These payments are shown below as red bars, based on testimony presented to the Water Issues Task Force Committee of the Utah Legislature on November 14, 2011. This testimony indicated these revenues totaled $20 million annually, beginning in the year 2020. This testimony and the slide below also shows the "Districts Contribute 10% Cost Share ($97 Million).



4. Existing Debt Service by Washington County Water District. Based on our initial and preliminary review of the 2011 Audited Financial Statement of the Washington County Water District, it appears this agency currently has approximately $10.7 million in existing annual debt service based upon previous obligations. These obligations are summarized as follows:

Bond	Total Loan (millions)	Initial Rate	Initial Date	Debt Service 2012 (millions)
General Obligation –				
Sand Hollow Project	4.045	3-5%	2009	0.583
Revenue bonds	20	3-5.25%	2002	0.645
District Revenue Bonds - Santa				
Clara transmission pipeline	2	2	2004	0.107
Revenue Bonds	19	4.9, 5.442	2005	1.561
Revenue Bonds	15.915		2007	0.745
Revenue Bonds	9.555	3-5.25%	2011	1.026
Bonds payable/ Grant 10				
million gallon storage tank	4	?	2010	0.324
Revenue bonds - water				
treatment plant	2.435	2.35	2011	0.171
Long Term Debt	60.823	3.90%		5.166
Revenue Bonds	16.53	3.90%	2012	0.391
			Annual Debt	**$10.719 million**

Note: there may be additional debts by this agency we are unaware of and the retirement dates of these bonds could not be determined.

Utah Division of Water Resources addressed their concerns regarding the economists' analysis in a letter dated November 30, 2012:

GARY R. HERBERT
Governor
GREG BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Water Resources
DENNIS J. STRONG
Division Director

November 30, 2012

Sen. Michael G. Waddoups
President of the Senate, Utah

Rep. Rebecca D. Lockhart
Speaker of the House, Utah

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Sen. Curtis S. Bramble, Chair
Rep. Patrick Painter, Chair
Revenue and Taxation Interim Committee

To All:

Water resources development is of fundamental importance to the economic and social well-being of Utah's citizens, businesses, and institutions. The Utah Division of Water Resources (DWRe) would like to address misconceptions surrounding the Lake Powell Pipeline (LPP) project recently voiced by some faculty members with the University of Utah and others (letter dated October 16, 2012, attached).

1. The LPP project has received extensive and well-reviewed economic analyses under the supervision of the DWRe, as required by state statute and federal requirements. These analyses, conducted by senior resource economists relying on an open review of the methodology and assumptions adopted, concluded that the LPP project's benefits exceeded the project's costs. The project would clearly yield net benefits to Utah citizens and the state's economy. The October 16 comments expressed by the faculty members do not refer to the completed economic analyses; nor did the faculty members offer any comments on those analyses during the formal comment period conducted by the DWRe as part of the federal licensing and permitting process. Their comments are predicated on a brief review of the Washington County Water Conservancy District's (WCWCD) 2011 financial profile.

2. A key problem is that the faculty members have over-simplified the repayment of the project by the water conservancy districts. Project financing will not be a simple "straight line" amortization schedule, as they have implied. The Lake Powell Pipeline Development Act explains the repayment plan that was put forth by the Legislature: it requires that state financing of the project will be repaid, including interest, by the water conservancy districts over a 50-year period commensurate with community growth.

3. Another key factor that appears diminished within the faculty member comments is an adequate appreciation for the future water demand growth within the WCWCD. It is this growth that will fund the basic project

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development and long-term operations. This will be properly and carefully adopted within the financial packages. Due to its nature - a 140-mile buried pipeline - the project cannot be built at a smaller capacity and then enlarged without the final cost being significantly greater than building it initially for full development. One of the benefits of state financing of the project is that it allows the districts to repay their obligations over a longer time as the use of the project ramps up with population growth. In the financial markets, the districts would likely only get a 30-year repayment period without having the debt service costs increase markedly.

4. All of the above financial elements must be understood within a larger context, wherein alternatives to LPP project development would be much more costly than the LPP, and will likely affect water use within the WCWCD service area reflective to both cost-of-supply increases and different lifestyle amenities. The project review economists anticipate that future water resource costs will escalate in real terms by about 2.5 percent, above general inflation. Consequently, the DWRe views the LPP project as a means to responsibly stabilize future costs while also developing cost-effective water conservation and other resources.

The future will bring higher water resource costs - period. We are working with Washington and Kane counties to find the least expensive alternative for them. Washington County, especially, has limited water supplies and, even with meeting the state's water conservation goal, will eventually need more water than is available in the county. We believe the project is a worthy use of a portion of Utah's Colorado River allotment to supply this need.

We would welcome the opportunity for direct briefings with legislative leadership to better explain the complex analyses that have been completed, and to collect your insights toward this effort as we continue review of the LPP project and prepare our recommendations to the Legislature and Governor.

It is our desire to meet the future water demands of Utah by relying on cost-effective and socially responsible projects.

Respectfully,

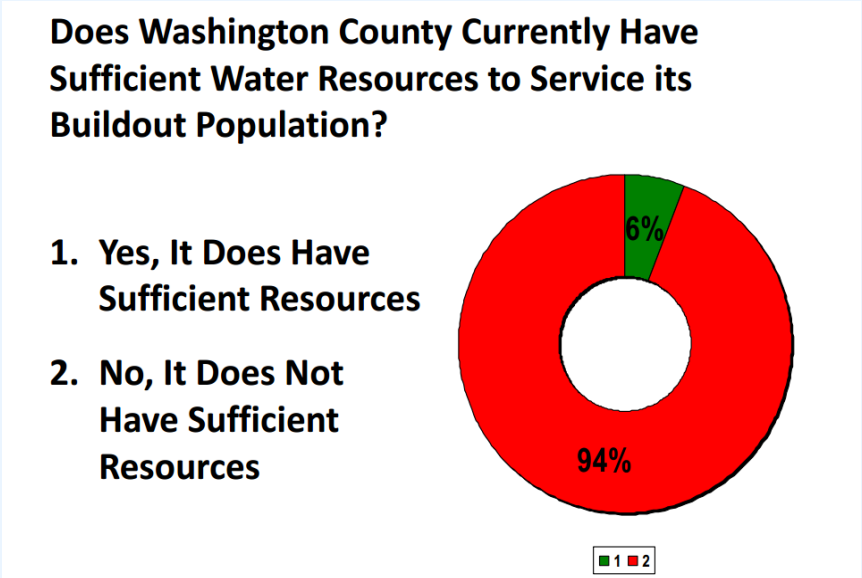
Dennis J. Strong, P.E.
Director

Attachment
cc: Margaret Dayton, Utah State Senate
Ron Thompson, Washington County WCD
Mike Noel, Kane County WCD
Mike Styler, Department of Natural Resources

Jeremy stated that what has been relayed to him is that the whole idea behind the economists penning these letters was not that the letters would be used to stop the pipeline as it is now being brought forward, but that more information was needed because of the magnitude of these expenditures to the state of Utah and ultimately to Washington County. A key problem is that faculty members have over-simplified repayment of the project by the District. In addition to work Applied Analysis, the State of Utah Division of Water Resources and the District have done, Matt Millis of Zion's Bank is building a much more exhaustive model than the preliminary one to be used for purposes of discussion today. All of our combined conclusions indicate that what the economists offer is **not** indicative of the financing process the LPPA calls for.

Jeremy stated that Washington County is estimated to have a build-out population of approximately 607,334 according to the District's Regional Water Capital Facilities Plan and Impact Fee Analysis done in 2006. The last meeting with Jeremy concluded that Washington County is among the fastest growing counties and in the fastest growing state in the United States. Without knowing exactly what that rate of growth is going to be, we do know it is not going to be zero.

QUESTION: Nonetheless, for purposes of this discussion, does Washington County currently have sufficient water resources to service its build out population?

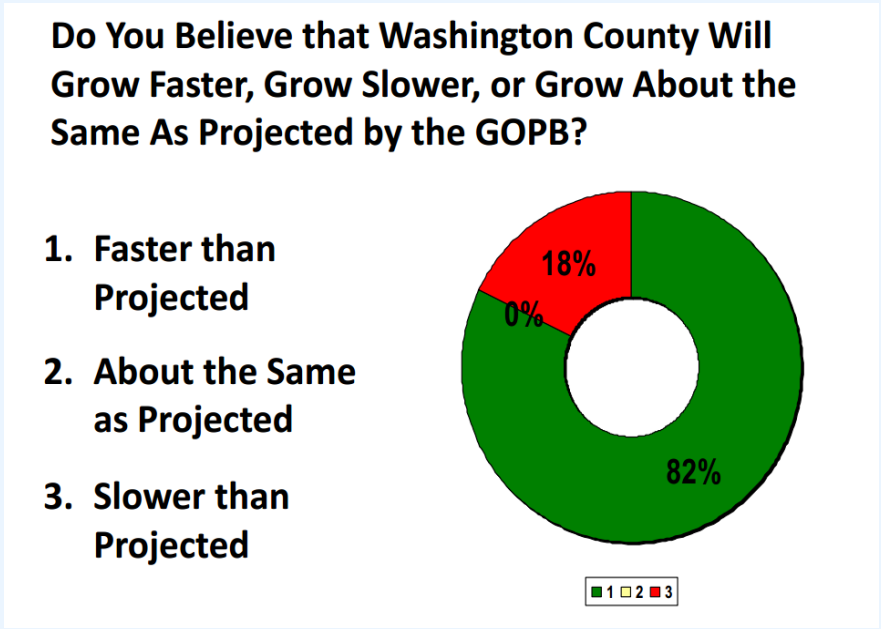


ANSWER: 94% believe that we have sufficient resources and 6% believe we do not.

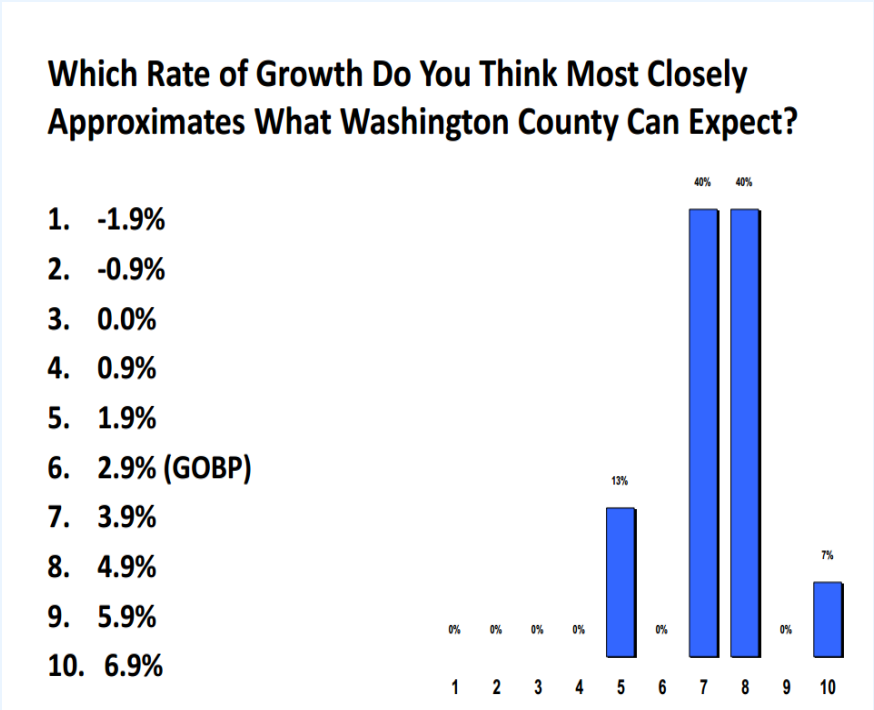
Jeremy noted that Dr. Lozada's economic model with increases in demand and population growth shows that Washington County is going to run out of water, even with conservation, at some point in the future. We may not agree as to when, but we want to have a conversation and come to some consensus. The statewide Roadmap of Utah's Future Water Development and Infrastructure prepared at the request of Governor Herbert and the Utah Division of Water Resources states that the expectation in this specific area by 2060 will require an additional 143,000 acre feet (af) with a projected water project cost of $3,758M and $1,417.1M in repair and replacement of existing

infrastructure in order to meet demand of growth and insure stability. The Governor's Office of Planning and Budget (GOPB) estimates Washington County's population will grow at an annual rate of 2.9% per year from 2013 to 2060. This rate is significantly slower than the region's historical rate of population growth, but is significantly faster than the rate reported between 2009 and 2012.

QUESTION: Do you believe Washington County will grow faster, grow slower or grow about the same as projected by the GOPB?

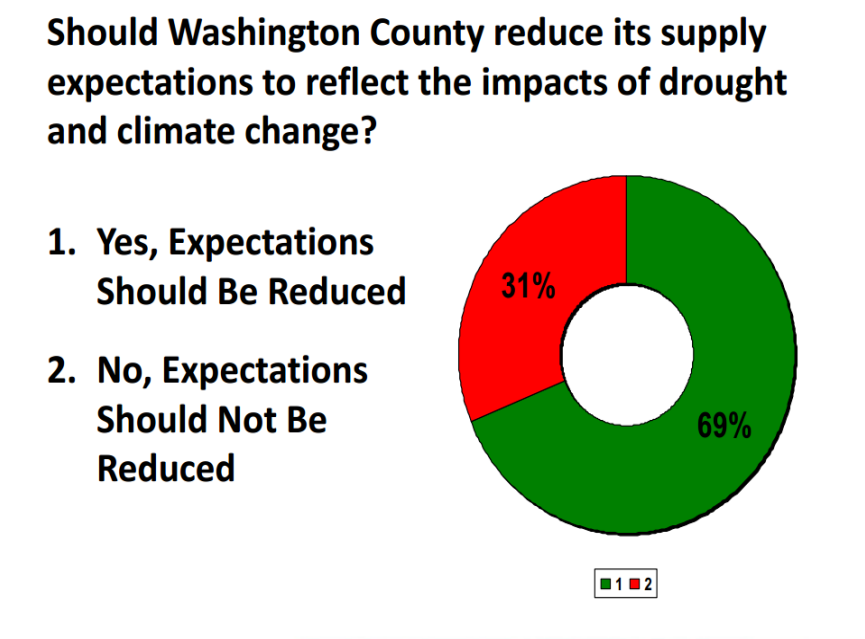


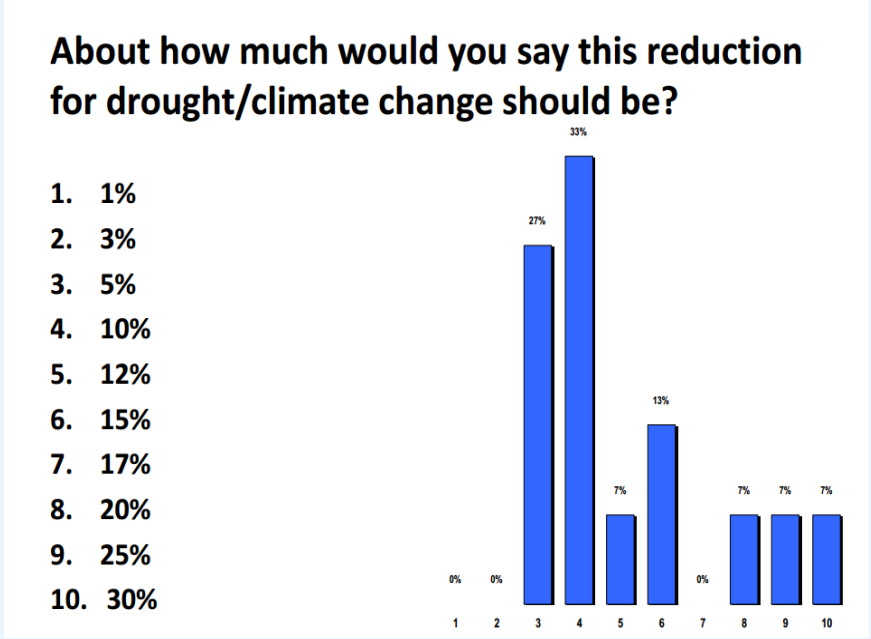
QUESTION: Which rate of growth do you think mostly closely approximates what Washington County can expect?



Jeremy referred to the previous discussion about the supply of water that exists in Washington County. The question here is if drought and climate change are occurring or going to occur and looking at the reserves of water we have today, does it make sense for us to make the assumption that maybe five to ten years from now, we should factor down the supply that we currently have to reflect the impacts of drought and climate change? This is only looking at the resources we have today.

QUESTION: Should Washington County reduce its supply expectations to reflect the impacts of drought and climate change?

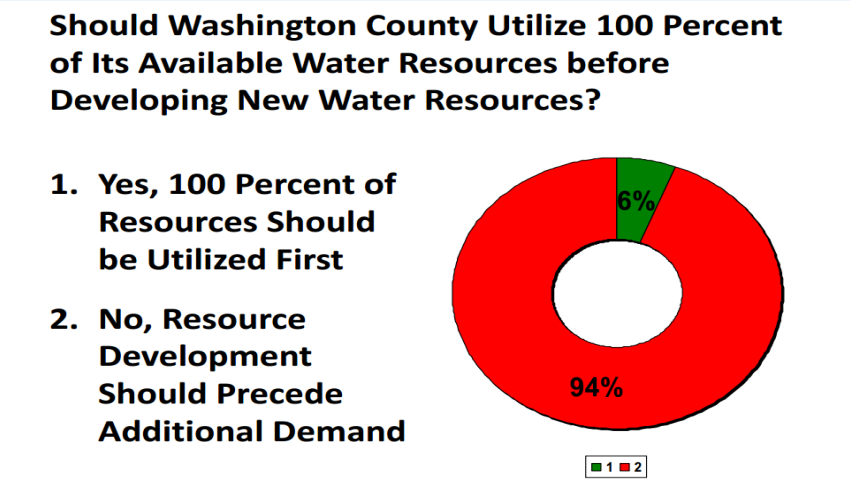




Jeremy noted that 69% believe "yes" we need to be concerned about drought and climate change and 31% said no (1/3 say "no"), we shouldn't have expectations. With that, how much would you say this reduction for drought/climate change should be in order to be prudent? Right now you have about 75,000 af of water for planning purposes. If the resources we have are not as much as we thought they would be if the drought or climate change continues, by how much do you believe we should reduce it?

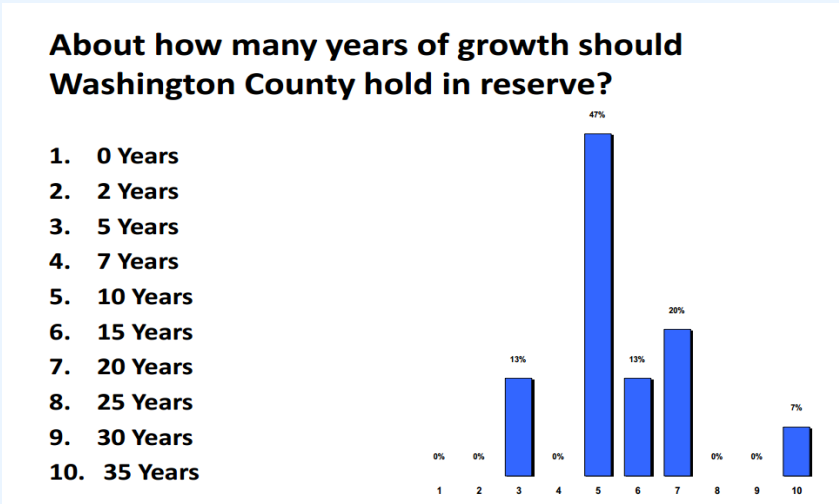
There is an issue surrounding the idea that we have already said water resources are finite and generally agreed that there are not enough water resources for build-out population and agreed that growth would be somewhat higher than the GOBP. If we combine all of those things there will be incremental demand for water which will ultimately take time. There are those that believe you should use 100% of what you have before you get a pipeline or actively pursue additional water resources. There are others that say there are peak years with a higher snow pack level, or it could be unusually hot years, and we need to be prepared for those events.

QUESTION: Should Washington County utilize 100 percent of its available water resources before developing new water resources?

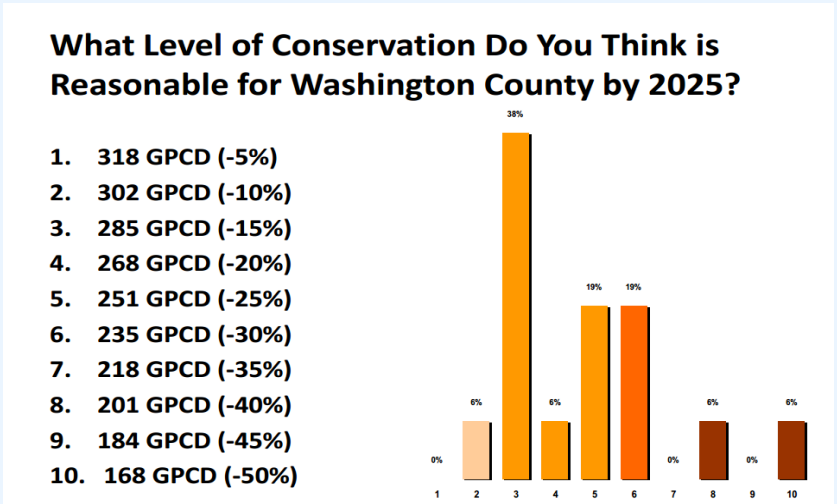


Conservation is important, but does not come without a cost. A January 2011 SWSI 2010 Municipal and Industrial Water Conservation Strategies report done for the State of Colorado brings up passive and active water conservation. Passive is natural replacement of toilets, clothes washers, and other standard domestic fixtures. Active is education programs, landscape audits, landscape restrictions, rebates for landscape changes and turf replacement programs, required retrofits on sale of property, leakage detection programs, elimination of single pass cooling and other conservation programs. Passive water conservation costs $0, and active conservation costs about $10,600 per af to achieve. Active can be relatively expensive particularly when you try to conserve a great deal. You have also seen a report from Western Resources Advocates where they suggest that the estimated one-time cost to save 1 af is about $3,824 for the utility and $13,980 for the community.

QUESTION: About how many years of growth should Washington County hold in reserve?



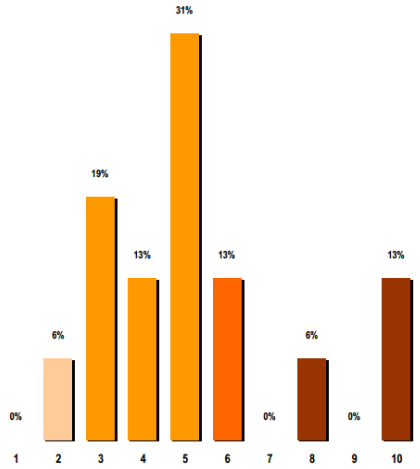
QUESTION: What level of conservation do you think is reasonable for Washington County by 2025?



QUESTION: What level of conservation do you think is reasonable for Washington County by 2050?

What Level of Conservation Do You Think is Reasonable for Washington County by 2050?

1. 318 GPCD (-5%)
2. 302 GPCD (-10%)
3. 285 GPCD (-15%)
4. 268 GPCD (-20%)
5. 251 GPCD (-25%)
6. 235 GPCD (-30%)
7. 218 GPCD (-35%)
8. 201 GPCD (-40%)
9. 184 GPCD (-45%)
10. 168 GPCD (-50%)



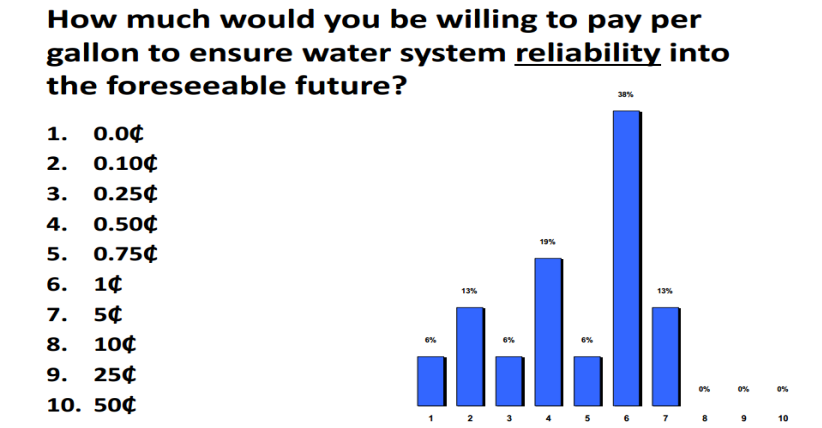
Jeremy used the numbers in the economist letter and talked about what the economists did as part of their model. He noted that there were limits to what they provide. They said the pipeline would cost $969M at 4% interest. Carrying that out over 50 years, they said it would cost $45.1M every year. There are some incorrect issues here:

1) you don't need the water here yet, so the idea that you pay for it now would amount to huge increases in impact fees because we are comparing what we are going to need way down the road to our needs in 2014.

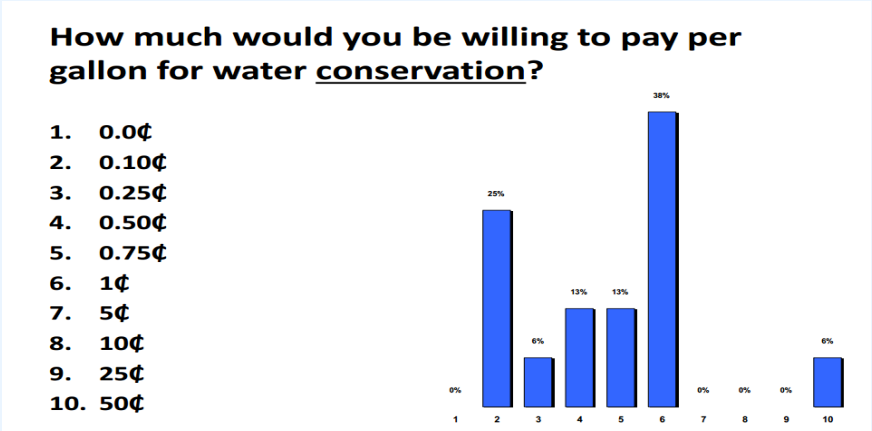
2) the other limitation is an either-or deal that assumes 100% of this $45M annual payment is loaded on water rates or is loaded 100% on impact fees. In reality, water rates going up by 100% and at the same time impact fees going up by 100% doesn't look anything like the LPPP financing model, unlike the economists have in their model. Under the LPPA, water will be taken down in blocks.

In the second analysis that the economists presented, they offered the assumption of a prepayment where essentially Washington County would pay close to $96.9M, about 10% of the project, at the point the Lake Powell pipeline is constructed. In this analysis they make a payment in 2014 and assume 3% interest, as provided in the October 2012 letter. They have an initial investment that happens in a single year, followed by payments in 2015, 2017 and 2019. Again, they made the assumption that you capitalize the interest and that Washington County is fielding the entirety of that debt. They also made the assumption of a straight-line balance, and did not make any projection of how you would actually pay the down payment as outlined in the letters from the Division of Water Resources. Their cited impact fees are massive, whereas the LPPP would actually be lower because they are carried over more years and distributed over more people who are building a home or office complex. This is supply and demand. There are really three primary considerations when we think about water resources: reliability, capacity and conservation. They are each important and play off one another.

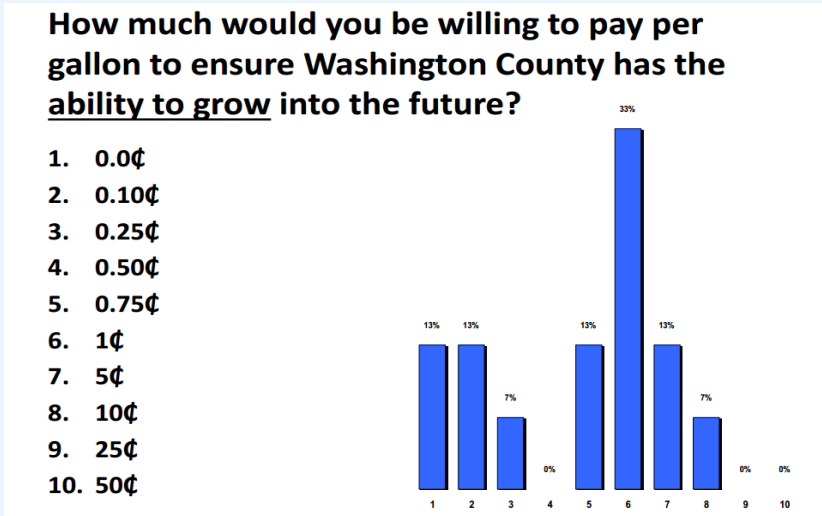
QUESTION: How much would you be willing to pay per gallon to ensure water system reliability into the foreseeable future?



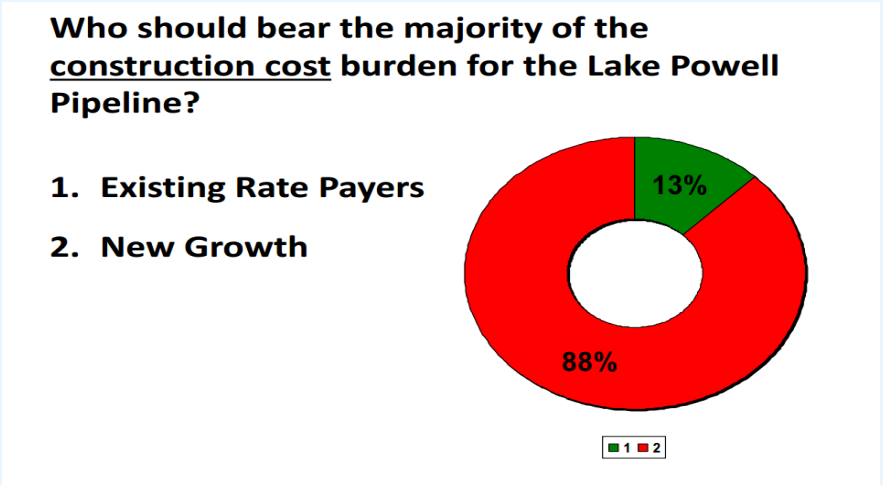
QUESTION: How much would you be willing to pay per gallon for water conservation?



QUESTION: How much would you be willing to pay per gallon to ensure Washington County has the ability to grow into the future?

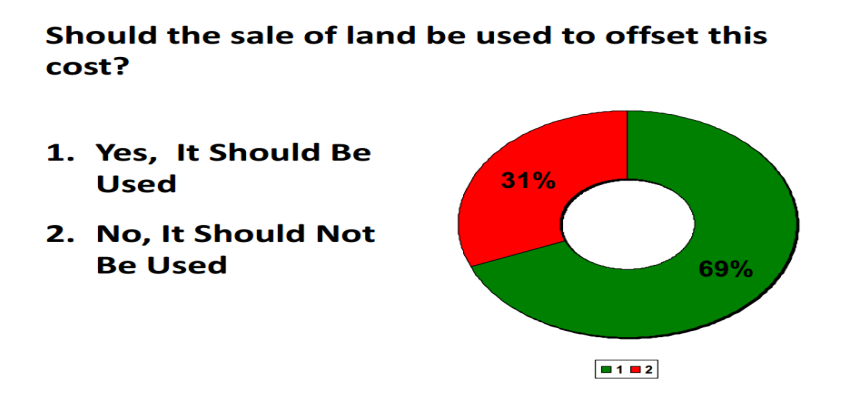


QUESTION: Who should bear the majority of the construction cost burden for the Lake Powell pipeline? Essentially rates verses impact fees?



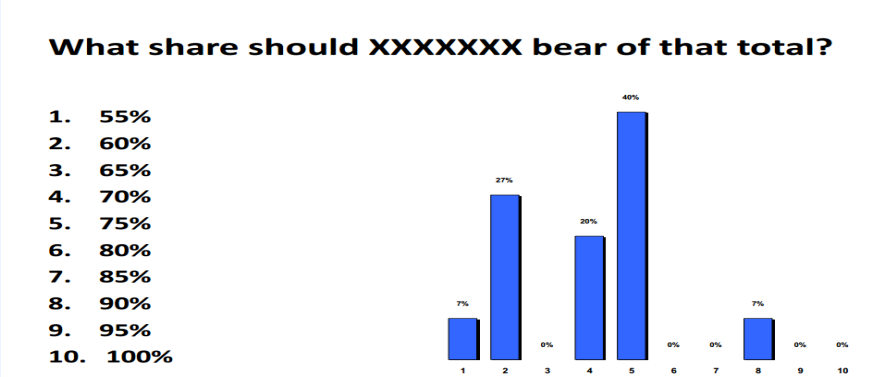
The district owns a certain amount of property around Sand Hollow reservoir and there has been some discussion about selling that land.

QUESTION: Should the sale of land be used to offset this cost?

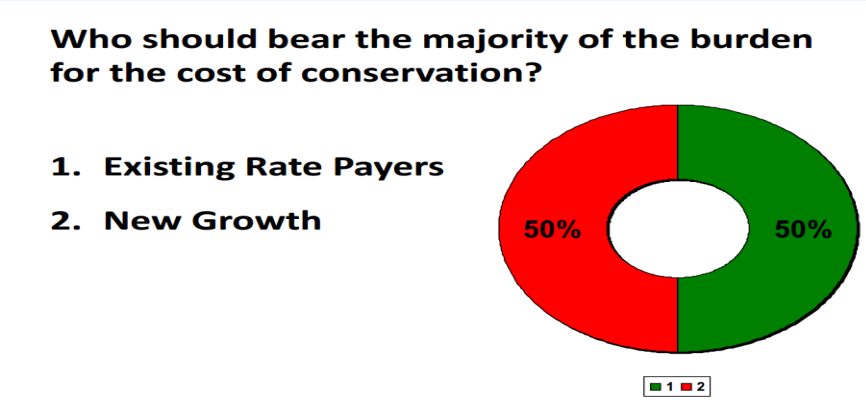


When we think about the cost of construction, what percentage should growth bear of that total? Your overwhelming response was that growth should pay for growth.

QUESTION: What percentage share should growth bear of that total?

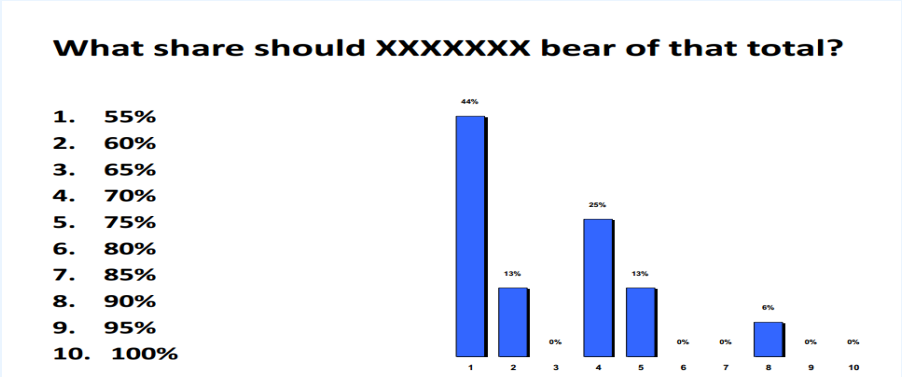


QUESTION: Who should bear the majority of the burden for the cost of conservation?



Essentially you are saying that the burden of conservation should be split roughly half between impact fees and rates.

QUESTION: What share should impact fees bear of the total? Again only talking about conservation?



Jeremy put in assumptions such as when to complete the LPP, number of years to complete the LPP, total evaporation percentage lost, initial capital payment, cash payment for sale of land, 50/50 split between water rates and impact fees, cost of conservation, debt goes down over time, pay as you go, interest at the time water is actually utilized, and demonstrated the results based on these assumptions. We don't have to bear full pay-back from day one. This is pay as you go financing. We don't take water until needed. We can spread out impact fees and rates until we have to make a bond payment. The cost isn't anywhere near some of the reports being circulated.

The cost of the capital may be about 25 cents per 1,000 gallons. This is pay as you go financing. You have to repay the $900M that is ultimately going to construction costs of project, but we don't have to bear any more interest than you chose to borrow. We can change our model in a thousand different ways. There are limitations of the analysis. We are talking about the LPPP, not about hydroelectric, distribution, repairs and replacement. Those are much larger discussions that have to be done. With that, I appreciate the opportunity to be with your group today.

3. Public Comments

Warren Wright: Does the WCWCD (or any of its members) consider it a legitimate effort to try and slow or moderate growth in the St. George metro area? ANSWER: Growth policy discussions are within the purview of the elected city and county government.

Dale Barnes: Why not charge $1.58 per thousand up to $15,000, then ramp up fast after that to encourage conservation? ANSWER: This is definitely worth evaluation.

Bob Bennett: Specifically, for the average homeowner (say $250,000 house), what will be the increase in monthly water rates and the increase in yearly property taxes? I realize these will be minimal estimates as the project will almost certainly cost more than estimated. ANSWER: Good questions that will have complete answers as soon as issues involved are defined and determined.

Susan Biesele: If water is such a concern, why is Washington County (and the cities within it) promoting new growth by approving new developments, i.e. Escapes at Green Springs? ANSWER: The policy for growth is under the purview of county and city boards and councils. We will send your question forward.

Paul Van Dam: (1) Why does the estimated cost of the pipeline not include interest, the added cost of waiting up to 10 years to build and the additions of the pump storage component? ANSWER: Interest rates are not included. There are no specified costs for waiting. (2) Why is the cost and financing date being given by a person with no formal training in these areas? ANSWER: Mr. Aguero has extensive education, training and experience in these issues.

Tom Butine: Good demonstration of the model. How are you going to determine the values for the variables that drive the model (certainly not by a CIRPAC vote)? How has the model been updated? Who will provide financing? Has it been secured? ANSWER: The model will be updated and finalized over time as data is made available. Under the Lake Powell Pipeline Development Act, the state is expected to provide financing. That decisions will be finalized after the environmental studies are complete.

Tom Butine: A very real, perhaps paramount issue is the impact on the Compact of over allocation and climate change. How do you

determine the probability that LPP will be able to draw water? ANSWER: The availability of water is determined by the Bureau of Reclamation and the state of Utah based upon scientific analysis. These determinations make it clear that there is almost no chance the LPP will not be able to draw water.

Tom Butine: The recent Waterline showed a chart of historical Colorado River flows. There are now projected/predicted flows that indicate the anticipated future flows based on climate change and other impacts. Which of these studies are you using, what are their predictions, how do you justify which studies you use, and what impact do they have on the probability that the river will support the pipeline? ANSWER: The studies we use come from the state of Utah and the Bureau of Reclamation, along with work done by MWH, the state's consulting engineers. They are justified by the best available scientific evidence and extensive review. They show that the water in the Colorado River will support the LPP.

Jeff Fieldman: Have you studied local water resources other than those given to you by the WCWCD? ANSWER: Yes.

Lisa Rutherford: While the state is waiting for Washington County and Kane County to decide to take water, who will be paying for the pipeline that will already have been built? ANSWER: The Lake Powell Pipeline Development Act governs current costs.

Lisa Rutherford: There is no "meeting summary" for May 2013, June 2013, September 2013 and October 2013. Why and when will be posted? ANSWER: See on the District's website under Agendas, Materials and Presentations http://www.wcwcd.org/information/cirpac/agendas/

Lisa Rutherford: The CIRPAC's Q&A document on the website is only current through the March 2013 meeting. Where are the other meetings' information? ANSWER: With limited staff, there may be delays in posting answers, but they will be posted.

Lisa Rutherford: We need a report on other cities' 2nd homes: how many, do they use to compute their gpcd #s? ANSWER: This is a complex issue with a wide variety of potential approaches. A study of this nature would be costly, if feasible., as the computations change for each state and/or community.

Lisa Rutherford: The water district's 1995 Boyle report showed 40,000 af of AG conversion, but the 2008 and 2011 UDWR Water Needs Assessments show 12,400 af and 10,080 af, respectfully. Why the huge difference? ANSWER: The analysis is updated as additional review is conducted and more parties review and contribute to the discussion.

Lisa Rutherford: The 2009 Waterline said current water use was 54,800 af. According to WCWCD, 46,000 af were used in 2012. We're down 8,800 af apparently. Why? Conservation working? ANSWER: The analysis is updated as additional review is conducted and more parties review and contribute to the discussion.

4. Meeting conclusion and adjournment

John said the comments and questions and respective responses will be put into the record and on the website. He thanked Jeremy and thanked the committee for the great opportunity of working with them.

Adjourn

The meeting was adjourned at 6:03 p.m.